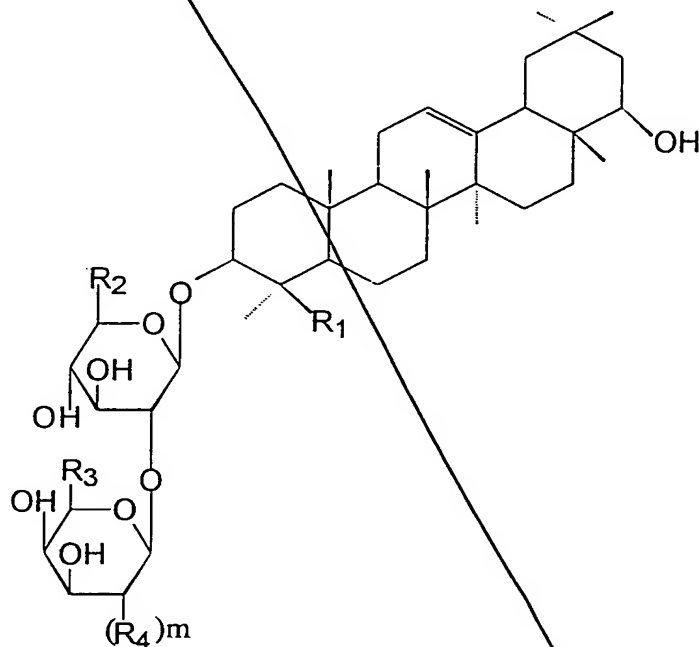


**SAPONIN DERIVATIVES FOR INHIBITION**  
**SIALYLTRANSFERASE ACTIVITY AND BIOSYNTHESIS OF**  
**SIALOGLYCOCONJUGATE**

**ABSTRACT OF THE DISCLOSURE**

5

The invention provides the use of the saponin derivatives, which is of the general formula (I) or the pharmaceutically acceptable salts and esters thereof:



wherein

R<sub>1</sub> is hydrogen, C<sub>1-8</sub> alkyl, C<sub>2-6</sub> alkenyl, C<sub>2-6</sub> alkynyl, or C<sub>1-8</sub> alkylhydroxy;

R<sub>2</sub> is hydrogen, C<sub>1-8</sub> alkyl, C<sub>2-6</sub> alkenyl, C<sub>2-6</sub> alkynyl, COOH, COOC<sub>1-8</sub>alkyl;

10

$R_3$  is  $C_{1-8}$  alkylhydroxy, hydrogen,  $C_{1-8}$  alkyl, C2-6 alkenyl or  $C_{2-6}$  alkynyl;

$R_4$  is a sugar residue; and

$m$  is 0, 1, 2 or 3;

- 5 and pharmaceutically acceptable carriers, as well as the use of such pharmaceutical composition in the inhibition of sialyltransferases.

10023604-121701